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**Amendments to Claims:**

This listing of claims will replace all prior versions and listings in the application:

**Listing of Claims:**

1-98. (Canceled)

99. (Currently Amended) The pharmaceutical composition according to claim 116, wherein the dendritic cells express an amount of the ~~fragmented~~ modified antigen to provide between about 1 to 100 micrograms of the ~~fragmented~~ modified antigen in said pharmaceutical composition.

100. (Canceled)

101. (Currently Amended) An *in vitro* composition comprising mature dendritic cells ~~presenting fragmented~~ expressing modified antigen and derived from an *in vitro* culture of an enriched and expanded population of proliferating dendritic cell precursors by a method comprising:

providing a tissue source comprising dendritic cell precursors;

treating the tissue source comprising dendritic cell precursors to increase the proportion of dendritic cell precursors;

culturing the tissue source on a substrate in a culture medium comprising GM-CSF to obtain cell aggregates comprising proliferating dendritic cell precursors; and

subculturing the cell aggregates at least one time to enrich the proportion of dendritic cell precursors;

serially subculturing the cell aggregates one or more times to enrich the proportion of dendritic cell precursors; and

continuing to culture the dendritic cell precursors for a period of time to allow them to mature into mature dendritic cells;

wherein the dendritic cells are cultured *in vitro* in the presence of an antigen for a time sufficient to allow the antigen to bind to the dendritic cells and wherein the dendritic cells process the antigen to produce a modified antigen which is expressed by the dendritic cells ~~be fragmented and presented~~.

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102-103. (Canceled)

104. (Previously Presented) The composition according to claim 101, wherein the tissue source is blood.

105. (Previously Presented) The composition according to claim 101, wherein the tissue source is bone marrow.

106. (Previously Presented) The composition according to claim 101, wherein GM-CSF is present in the culture medium at a concentration of about 1-1000 U/ml.

107. (Previously Presented) The composition according to claim 104, wherein the concentration of GM-CSF in the culture medium is about 30-100 U/ml.

108. (Previously Presented) The composition according to claim 105, wherein the concentration of GM-CSF in the culture medium is about 500-1000 U/ml.

109. (Previously Presented) The composition according to claim 101, wherein the cell aggregates are blood derived and are subcultured from about one to five times.

110. (Previously Presented) The composition according to claim 101, wherein the cell aggregates are subcultured one to five times.

111. (Previously Presented) The composition according to claim 101, wherein the culture medium is selected from the group consisting of RPMI 1640, DMEM and  $\alpha$ -MEM, and wherein the culture medium is supplemented with serum.

112. (Previously Presented) The composition according to claim 104, wherein the tissue source is treated to remove red blood cells.

113. (Previously Presented) The composition according to claim 105, wherein the tissue source is treated to remove B cells and granulocytes.

114-115. (Canceled)

116. (Previously Presented) A pharmaceutical composition comprising a therapeutically effective amount of the composition according to claim 101.

117-119. (Canceled)

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120. (Currently Amended) An *in vitro* composition comprising mature dendritic cells derived from an *in vitro* culture of a population of enriched and expanded proliferating precursor cells, wherein said dendritic cells are contacted *in vitro* with antigen in the presence of GM-CSF for a sufficient time to allow the antigen to bind to the dendritic cells, wherein the dendritic cells process the antigen to produce a modified antigen which is expressed by the dendritic cells for antigen fragmentation and presentation to occur.

121-141. (Cancelled)

142. (Previously Presented) The composition according to claim 101, wherein the dendritic cell precursors are human.

143. (Previously Presented) The composition of dendritic cell precursors according to claim 142, wherein the dendritic cell precursors are obtained from blood.

144. (Previously Presented) The composition of dendritic cell precursors according to claim 142, wherein the dendritic cell precursors are obtained from bone marrow.